

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, in the application:

What is claimed is:

1           1. (currently amended) A ~~cementitious material manufacturable process, said~~  
2    method for inhibiting the corrosion of metals embedded in a cementitious material, said  
3    cementitious material manufacturable from a process comprising the activities of:  
4           ~~providing cementitious material;~~  
5           manufacturing lithium nitrate; and  
6           providing said lithium nitrate for addition to said cementitious material at an  
7    ~~effective dosage rate for inhibiting the corrosion of metals embedded in the~~  
8    ~~cementitious material.~~

1           2. (original) The method of claim 1, wherein said effective dosage rate is  
2    between about 0.01 gram moles of lithium nitrate per cubic foot of cementitious  
3    material and about 100 gram moles of lithium nitrate per cubic foot of cementitious  
4    material.

1           3. (original) The method of claim 1, wherein said effective dosage rate is  
2    between about 0.01 gram moles of lithium nitrate per cubic foot of cementitious  
3    material and about 0.1 gram moles of lithium nitrate per cubic foot of cementitious  
4    material.

1           4. (original) The method of claim 1, wherein said effective dosage rate is  
2    between about 0.1 gram moles of lithium nitrate per cubic foot of cementitious material  
3    and about 1 gram moles of lithium nitrate per cubic foot of cementitious material.

1           5. (original) The method of claim 1, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of cementitious material  
3 and about 10 gram moles of lithium nitrate per cubic foot of cementitious material.

1           6. (original) The method of claim 1, wherein said effective dosage rate is  
2 between about 10 gram moles of lithium nitrate per cubic foot of cementitious material  
3 and about 100 gram moles of lithium nitrate per cubic foot of cementitious material.

1           7. (original) The method of claim 1, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of cementitious material.

1           8. (original) The method of claim 1, wherein said lithium nitrate is provided as  
2 a solid.

1           9. (original) The method of claim 1, wherein said lithium nitrate is provided in  
2 an aqueous solution.

1           10. (original) The method of claim 1, wherein said cementitious material is  
2 concrete.

1           11. (original) The method of claim 1, wherein said cementitious material is  
2 grout.

1           12.     The method of claim 1, wherein said cementitious material is mortar.

1           13. (original) The method of claim 1, wherein said cementitious material is  
2 pozzalanic cement.

1           14. (original) The method of claim 1, wherein said cementitious material is at  
2           least one of cement, grout, mortar, and pozzalanic cement, or any combination thereof.

1           15. (currently amended) ~~A concrete or cementitious material manufacturable~~  
2           ~~process, said method for inhibiting the corrosion of metals embedded in concrete or any~~  
3           ~~other cementitious material, said concrete or cementitious material manufacturable~~  
4           from a process comprising the activities of:  
5           ~~providing concrete or any other cementitious material;~~  
6           obtaining lithium nitrate; and  
7           mixing said lithium nitrate with said concrete or cementitious material at an  
8           effective dosage rate ~~for inhibiting the corrosion of metals embedded in the concrete or~~  
9           ~~any other of the cementitious material.~~

1           16. (original) The method of claim 15, wherein said effective dosage rate is  
2           between about 0.01 gram moles of lithium nitrate per cubic foot of concrete or  
3           cementitious material and about 100 gram moles of lithium nitrate per cubic foot of  
4           concrete or cementitious material.

1           17. (original) The method of claim 15, wherein said effective dosage rate is  
2           between about 0.01 gram moles of lithium nitrate per cubic foot of concrete or  
3           cementitious material and about 0.1 gram moles of lithium nitrate per cubic foot of  
4           concrete or cementitious material.

1           18. (original) The method of claim 15, wherein said effective dosage rate is  
2           between about 0.1 gram moles of lithium nitrate per cubic foot of concrete or  
3           cementitious material and about 1 gram moles of lithium nitrate per cubic foot of  
4           concrete or cementitious material.

1           19. (original) The method of claim 15, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of concrete or  
3 cementitious material and about 10 gram moles of lithium nitrate per cubic foot of  
4 concrete or cementitious material.

1           20. (original) The method of claim 15, wherein said effective dosage rate is  
2 between about 10 gram moles of lithium nitrate per cubic foot of concrete or  
3 cementitious material and about 100 gram moles of lithium nitrate per cubic foot of  
4 concrete or cementitious material.

1           21. (original) The method of claim 15, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of concrete or cementitious  
3 material.

1           22. (currently amended) A ~~grout manufacturable process~~method for inhibiting  
2 the corrosion of metals embedded in grout, said grout manufacturable from a process  
3 comprising the activities of:  
4           ~~providing grout material;~~  
5           obtaining lithium nitrate; and  
6           mixing said lithium nitrate with said grout at an effective dosage rate ~~for~~  
7 ~~inhibiting the corrosion of metals embedded in the grout.~~

1           23. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 80  
3 gram moles of lithium nitrate per cubic foot of grout.

1           24. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 82  
3 gram moles of lithium nitrate per cubic foot of grout.

1           25. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 100  
3 gram moles of lithium nitrate per cubic foot of grout. .

1           26. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 0.1  
3 gram moles of lithium nitrate per cubic foot of grout.

1           27. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 0.1 gram moles of lithium nitrate per cubic foot of grout and about 1  
3 gram moles of lithium nitrate per cubic foot of grout.

1           28. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of grout and about 10  
3 gram moles of lithium nitrate per cubic foot of grout.

1           29. (original) The method of claim 22, wherein said effective dosage rate is  
2 between about 10 gram moles of lithium nitrate per cubic foot of grout and about 100  
3 gram moles of lithium nitrate per cubic foot of grout.

1           30. (original) The method of claim 22, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of grout.

1           31. (currently amended) A mortar-manufacturable process, method for  
2 inhibiting the corrosion of metals embedded in mortar, said mortar manufacturable  
3 from a said process comprising the activities of:  
4           ~~providing mortar material;~~  
5           obtaining lithium nitrate; and

6 mixing said lithium nitrate with said mortar at an effective dosage rate for  
7 ~~inhibiting the corrosion of metals embedded in the mortar.~~

1 32. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about 80  
3 gram moles of lithium nitrate per cubic foot of mortar.

1 33. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about 82  
3 gram moles of lithium nitrate per cubic foot of mortar.

1 34. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about  
3 100 gram moles of lithium nitrate per cubic foot of mortar.

1 35. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about  
3 0.1 gram moles of lithium nitrate per cubic foot of mortar.

1 36. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 0.1 gram moles of lithium nitrate per cubic foot of mortar and about 1  
3 gram moles of lithium nitrate per cubic foot of mortar.

1 37. (original) The method of claim 31, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of mortar and about 10  
3 gram moles of lithium nitrate per cubic foot of mortar.

1 38. (original) The method of claim 31, wherein said effective dosage rate is

2 between about 10 gram moles of lithium nitrate per cubic foot of mortar and about 100  
3 gram moles of lithium nitrate per cubic foot of mortar.

1 39. (original) The method of claim 31, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of mortar.

1 40. (currently amended) A ~~cementitious material manufacturable process;~~  
2 method for inhibiting the corrosion of metals embedded in cementitious material, said  
3 cementitious material manufacturable from a said process comprising the activities of:  
4 ~~providing cementitious material;~~  
5 obtaining lithium nitrate; and  
6 applying said lithium nitrate to the surface of said cementitious material at an  
7 effective dosage rate ~~for inhibiting the corrosion of metals embedded in the~~  
8 ~~cementitious material.~~

1 41. (original) The method of claim 40, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of cementitious  
3 material and about 100 gram moles of lithium nitrate per cubic foot of cementitious  
4 material.

1 42. (original) The method of claim 40, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of cementitious  
3 material and about 0.10 gram moles of lithium nitrate per cubic foot of cementitious  
4 material.

1 43. (original) The method of claim 40, wherein said effective dosage rate is  
2 between about 0.1 gram moles of lithium nitrate per cubic foot of cementitious material  
3 and about 1 gram moles of lithium nitrate per cubic foot of cementitious material.

1           44. (original) The method of claim 40, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of cementitious material  
3 and about 10 gram moles of lithium nitrate per cubic foot of cementitious material.

1           45. (original) The method of claim 40, wherein said effective dosage rate is  
2 between about 10 gram moles of lithium nitrate per cubic foot of cementitious material  
3 and about 100 gram moles of lithium nitrate per cubic foot of cementitious material.

1           46. (original) The method of claim 40, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of cementitious material.

1           47. (currently amended) ~~A cementitious material manufacturable process;~~  
2 method for inhibiting the corrosion of metals in embedded in cementitious material,  
3 said cementitious material manufacturable from a previously heated Portland cement  
4 composition, said Portland cement manufacturable from a said-process comprising the  
5 activities of:

6           ~~providing cementitious material, said cementitious material manufacturable~~  
7 ~~from a previously heated Portland cement composition;~~

8           obtaining lithium nitrate; and

9           admixing said lithium nitrate with said Portland cement composition at an  
10 effective dosage rate ~~for inhibiting the corrosion of metals in embedded in the~~  
11 ~~cementitious material.~~

1           48. (original) The method of claim 47, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of cement and about  
3 100 gram moles of lithium nitrate per cubic foot of cement.

1           49. (original) The method of claim 47, wherein said effective dosage rate is  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of cement and about



3 0.1 gram moles of lithium nitrate per cubic foot of cement.

1 50. (original) The method of claim 47, wherein said effective dosage rate is  
2 between about 0.1 gram moles of lithium nitrate per cubic foot of cement and about 1  
3 gram moles of lithium nitrate per cubic foot of cement.

1 51. (original) The method of claim 47, wherein said effective dosage rate is  
2 between about 1 gram moles of lithium nitrate per cubic foot of cement and about 10  
3 gram moles of lithium nitrate per cubic foot of cement.

1 52. (original) The method of claim 47, wherein said effective dosage rate is  
2 between about 10 gram moles of lithium nitrate per cubic foot of cement and about 100  
3 gram moles of lithium nitrate per cubic foot of cement.

1 53. (original) The method of claim 47, wherein said effective dosage rate is  
2 about 0.815 gram moles of lithium nitrate per cubic foot of cement.

1 54. (currently amended) ~~A cementitious material manufacturable process;~~  
2 method for inhibiting the corrosion of metals embedded in cementitious material, said  
3 cementitious material comprising a Portland cement composition, said Portland cement  
4 composition creatable from a method process-comprising the activities of:  
5 ~~providing cementitious material, said cementitious material comprising a~~  
6 ~~Portland cement composition;~~  
7 obtaining lithium nitrate;  
8 admixing said lithium nitrate with said Portland cement in an amount sufficient  
9 to inhibit the corrosion of metals; and  
10 heating said material to form a Portland cement clinker ~~for inhibiting the~~  
11 ~~corrosion of metals embedded in cementitious material.~~

1           55. (original) The method of claim 54, wherein said sufficient amount  
2 provides a molar ratio of lithium to sodium equivalent in the resultant cement clinker  
3 of between about 0.01:1 to about 10:1.

1           56. (original) The method of claim 54, wherein said sufficient amount  
2 provides a molar ratio of lithium to sodium equivalent in the resultant cement clinker  
3 of between about 0.01:1 to about 0.1:1.

1           57. (original) The method of claim 54, wherein said sufficient amount  
2 provides a molar ratio of lithium to sodium equivalent in the resultant cement clinker  
3 of between about 0.1:1 to about 1:1.

1           58. (original) The method of claim 54, wherein said sufficient amount  
2 provides a molar ratio of lithium to sodium equivalent in the resultant cement clinker  
3 of between about 1:1 to about 5:1.

1           59. (original) The method of claim 54, wherein said sufficient amount  
2 provides a molar ratio of lithium to sodium equivalent in the resultant cement clinker  
3 of between about 5:1 to about 10:1.

1           60. (cancelled) A composition comprising:  
2 a concrete or cementitious material comprising between about 0.01 gram moles  
3 of lithium nitrate per cubic foot of concrete to about 100 gram moles of lithium nitrate  
4 per cubic foot of concrete or cementitious material.

1           61. (cancelled) The composition of claim 60, wherein said concrete or  
2 cementitious material comprises between about 0.01 gram moles of lithium nitrate per  
3 cubic foot of concrete to about 0.1 gram moles of lithium nitrate per cubic foot of  
4 concrete or cementitious material.

1           62. (cancelled) The composition of claim 60, wherein said concrete or  
2   cementitious material comprises between about 0.1 gram moles of lithium nitrate per  
3   cubic foot of concrete to about 1 gram moles of lithium nitrate per cubic foot of  
4   concrete.

1           63. (cancelled) The composition of claim 60, wherein said concrete or  
2   cementitious material comprises between about 1 gram moles of lithium nitrate per  
3   cubic foot of concrete to about 10 gram moles of lithium nitrate per cubic foot of  
4   concrete or cementitious material.

1           64. (cancelled) The composition of claim 60, wherein said concrete or  
2   cementitious material comprises between about 10 gram moles of lithium nitrate per  
3   cubic foot of concrete to about 100 gram moles of lithium nitrate per cubic foot of  
4   concrete or cementitious material.

1           65. (cancelled) The composition of claim 60, wherein said concrete or  
2   cementitious material comprises about 0.815 gram moles of lithium nitrate per cubic  
3   foot of grout or cementitious material.

1           66. (cancelled) A composition comprising:  
2           a grout comprising between about 0.01 gram moles of lithium nitrate per cubic  
3   foot of grout to about 100 gram moles of lithium nitrate per cubic foot of grout.

1           67. (cancelled) The composition of claim 66, wherein said grout comprises  
2   between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 80  
3   gram moles of lithium nitrate per cubic foot of grout.

1           68. (cancelled) The composition of claim 66, wherein said grout comprises  
2   between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 82

3 gram moles of lithium nitrate per cubic foot of grout.

1 69. (cancelled) The composition of claim 66, wherein grout comprises  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of grout and about 0.1  
3 gram moles of lithium nitrate per cubic foot of grout.

1 70. (cancelled) The composition of claim 66, wherein said grout between  
2 about 0.1 gram moles of lithium nitrate per cubic foot of grout and about 1 gram moles  
3 of lithium nitrate per cubic foot of grout.

1 71. (cancelled) The composition of claim 66, wherein said grout comprises  
2 between about 1 gram moles of lithium nitrate per cubic foot of grout and about 10  
3 gram moles of lithium nitrate per cubic foot of grout.

1 72. (cancelled) The composition of claim 66, wherein said grout comprises  
2 between about 10 gram moles of lithium nitrate per cubic foot of grout and about 100  
3 gram moles of lithium nitrate per cubic foot of grout.

1 73. (cancelled) The composition of claim 66, wherein said grout comprises  
2 about 0.815 gram moles of lithium nitrate per cubic foot of grout.

1 74. (cancelled) A composition comprising:  
2 a mortar comprising between about 0.01 gram moles of lithium nitrate per cubic  
3 foot of mortar to about 100 gram moles of lithium nitrate per cubic foot of mortar.

1 75. (cancelled) The composition of claim 74, wherein said mortar comprises  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about 80  
3 gram moles of lithium nitrate per cubic foot of mortar.

1           76. (cancelled) The composition of claim 74, wherein said mortar comprises  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about 82  
3 gram moles of lithium nitrate per cubic foot of mortar.

1           77. (cancelled) The composition of claim 74, wherein mortar comprises  
2 between about 0.01 gram moles of lithium nitrate per cubic foot of mortar and about  
3 0.1 gram moles of lithium nitrate per cubic foot of mortar.

1           78. (cancelled) The composition of claim 74, wherein said mortar between  
2 about 0.1 gram moles of lithium nitrate per cubic foot of mortar and about 1 gram  
3 moles of lithium nitrate per cubic foot of mortar.

1           79. (cancelled) The composition of claim 74, wherein said mortar comprises  
2 between about 1 gram moles of lithium nitrate per cubic foot of mortar and about 10  
3 gram moles of lithium nitrate per cubic foot of mortar.

1           80. (cancelled) The composition of claim 74, wherein said mortar comprises  
2 between about 10 gram moles of lithium nitrate per cubic foot of mortar and about 100  
3 gram moles of lithium nitrate per cubic foot of mortar.

1           81. (cancelled) The composition of claim 74, wherein said mortar comprises  
2 about 0.815 gram moles of lithium nitrate per cubic foot of mortar.

1           82. (cancelled) A composition comprising:  
2 a cementitious material comprising an effective amount lithium nitrate per  
3 cubic foot of cementitious material for inhibiting the corrosion of metals embedded in  
4 cementitious material.